Schottky Bipolar 3304A, 3304A-4, 3304AL6, 3324A, 3324A-4

HIGH SPEED 4096 BIT READ ONLY MEMORY

- **Fast Access Time—70ns (3304A, 3324A) Over Temperature and Supply Voltage Variation**
- **Low Standby Power Dissipation (3304AL6)—60 μW/bit**
- **Fully Decoded—on Chip Address Decode and Buffer**
- **DTL and TTL Compatible—Input Loading is 0.25 mA max—Output Sink is 15 mA**
- **Open Collector (3304A, 3304A-4, 3304AL6) and Three State (3324A, 3324A-4) Outputs**
- **Simple Memory Expansion—4 Chip Select Input Leads**
- **Standard Packaging—24 Pin Dual In-Line Lead Configuration**

The 3304A and 3324A device families are high density 4096 bit (512 words by 8-bit) ROMs. Electrical performance is specified over the complete ambient temperature range of 0°C to 75°C and V_{CC} supply voltage range of 5V ±5%. The 3304A and 3324A ROM families are pin compatible with the Intel 3604 and 3624 PROM families. Consequently initial circuit prototyping can be performed using the pin compatible PROMs.

The 3304A-4 and 3324A-4 are ideal for slower performance systems (>90 ns) where low system cost is a prime factor. For those systems requiring low power dissipation, one should consider the 3304AL6. Not only does the 3304AL6 dissipate 20% less active power than the 3304A, but is also has an added low standby power dissipation feature. Whenever the 3304AL6 is deselected, power dissipation is reduced by 70%.

The 3304A and 3324A device families are manufactured using Schottky barrier diode clamped transistors which results in higher speed performance than equivalent devices mode with gold diffusion process.

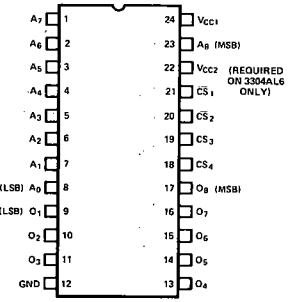
Mode/Pin Connection		Pin 22	Pin 24
Read:	3304A, 3304A-4, 3324A, 3324A-4	No Connect or 5V	5V
	3304AL6	+5V	No Connect
Standby Power:	3304AL6	Power dissipation is automatically reduced whenever the 3304AL6 is deselected.	

PIN NAMES

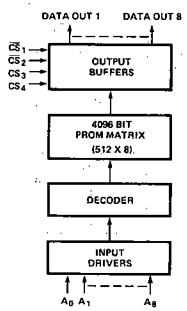
A_0–A_8	ADDRESS INPUTS
$\overline{CS}_1$–$\overline{CS}_2$, CS_3–CS_4 [1]	CHIP SELECT INPUTS
O_1–O_8	DATA OUTPUTS

[1] To select the ROM $\overline{CS}_1 = \overline{CS}_2 = 0$ and $CS_3 = CS_4 = 1$.

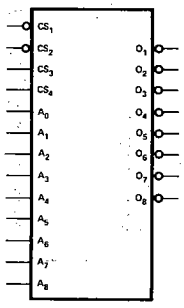
PIN CONFIGURATION



BLOCK DIAGRAM



LOGIC SYMBOL



*See Data Catalog Supplement for complete specifications.